



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,277	08/27/2003	Geoffry A. Westphal	31083.07US2	5507
34018	7590	08/20/2004	EXAMINER	
GREENBERG TRAUIG, LLP 77 WEST WACKER DRIVE SUITE 2500 CHICAGO, IL 60601-1732			LAROSE, COLIN M	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/649,277	Applicant(s) WESTPHAL ET AL.	
	Examiner Colin M. LaRose	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0304,0704</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,343,560 by Takeda et al. ("Takeda").

Regarding claim 25, Takeda discloses a hand-held device (figure 1), comprising:

a display (5);

a memory (9-13) having stored therein a concatenation file (figure 4) having data corresponding to a plurality of compressed images each representative of an original image (i.e. each original image is compressed by compression processor 14) and a look-up table (figure 5) having data indicative of a starting byte location of each of the compressed images within the concatenation file ("head address") and data indicative of the length of each of the compressed images within the concatenation file ("size");

a program (e.g. figure 2) cooperable with the look-up table for accessing the data corresponding to each of the plurality of compressed images and for decompressing and using

Art Unit: 2623

any accessed data to display an image representative of an original image (i.e. the compressed images are decompressed by expansion processor 15 and displayed on display 5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 13, 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,486,893 by Takagi in view of U.S. Patent 5,635,984 by Lee.

Regarding claim 13, Takagi discloses a system for compressing and storing a plurality of images, comprising:

creating for each of a plurality of original images a plurality of resultant images by altering the content of each of the plurality of original images a corresponding plurality of different ways (figure 15: a plurality of resultant images for an original image (figure 13) is displayed; the

Art Unit: 2623

figure shows only the resultant images for one original image in a digital camera, but Takagi's method is applicable to any pictures to be taken by the camera);

displaying each of the plurality of resultant images (as shown in figure 15);

selecting from the plurality of resultant images created from each of the plurality of original images one resultant image (column 2, lines 1-16: at least one resultant image for each original image is selected); and

storing the each of the selected one of the plurality of resultant images such that each of the selected one of the plurality of resultant images is retrievable to be displayed as a representation of its corresponding original image (disc device 15 stores selected images that are retrievable for display).

Takagi discloses displaying the plurality of resultant images on the camera screen as shown in figure 15, but Takagi is silent to compressing the plurality of resultant images.

Lee discloses a digital camera system. In particular, Lee discloses that in order to display more than one picture on the screen simultaneously (such as shown in figure 11D), that the picture data must be compressed (column 4, lines 22-28).

It would have been obvious to compress each resultant image as claimed, since Lee teaches that in order to display multiple images on a camera screen, as in figure 15 of Takagi, the images must be reduced so that they fit onto the screen.

Regarding claim 15, Takagi discloses a macro for automating the creating of the plurality of resultant images (figures 8-10 are macros for setting the parameters for the various resultant images).

Art Unit: 2623

Regarding claim 16, Takagi's discloses using multiple techniques to alter the original image (i.e. changing the exposure, focus, etc.).

Regarding claim 19, Takagi discloses sharpening the image by changing the focus (figure 9).

Regarding claim 20, Lee's table comprises file names (81), starting byte information (82), and length of the images (83), as claimed.

7. Claims 1-3, 6, 7, 12, 14, 28-30, 33, 34, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,486,893 by Takagi in view of U.S. Patent 5,635,984 by Lee and U.S. Patent 5,343,560 by Takeda et al. ("Takeda").

Regarding claims 1, 28, and 39, Takagi discloses a system for compressing and storing a plurality of images, comprising:

creating for each of a plurality of original images a plurality of resultant images by altering the content of each of the plurality of original images a corresponding plurality of different ways (figure 15: a plurality of resultant images for an original image (figure 13) is displayed; the figure shows only the resultant images for one original image in a digital camera, but Takagi's method is applicable to any pictures to be taken by the camera);

displaying each of the plurality of resultant images (as shown in figure 15);

selecting from the plurality of resultant images created from each of the plurality of original images one resultant image (column 2, lines 1-16: at least one resultant image for each original image is selected);

Art Unit: 2623

Takagi discloses displaying the plurality of resultant images on the camera screen as shown in figure 15, but Takagi is silent to compressing the plurality of resultant images.

Lee discloses a digital camera system. In particular, Lee discloses that in order to display more than one picture on the screen simultaneously (such as shown in figure 11D), that the picture data must be compressed (column 4, lines 22-28).

It would have been obvious to compress each resultant image as claimed, since Lee teaches that in order to display multiple images on a camera screen, as in figure 15 of Takagi, the images must be reduced so that they fit onto the screen.

Further regarding claims 1, 28, and 39, and in regards to claim 14, Takagi is also silent to placing each of the selected one of the plurality of resultant images into a concatenation file; and creating a look-up table corresponding to the concatenation file by which each of the selected one of the plurality of resultant images is retrievable from the concatenation file.

Takeda discloses a file system for storing and retrieving digital images. In particular, inputted images are stored into a concatenation file as shown in figure 4. Figure 5 shows a table that is created in order to retrieve images from the concatenation file.

It would have been obvious to place Takagi's selected resultant images into a concatenation file and then create a table to retrieve the images since Takeda teaches that these features, inter alia, speed up the retrieval of stored images (column 1, lines 49-61).

Regarding claims 2 and 29, Takagi discloses a macro for automating the creating of the plurality of resultant images (figures 8-10 are macros for setting the parameters for the various

Art Unit: 2623

resultant images).

Regarding claim 3 and 30, Takagi's discloses using multiple techniques to alter the original image (i.e. changing the exposure, focus, etc.).

Regarding claims 6 and 33, Takagi discloses sharpening the image by changing the focus (figure 9).

Regarding claim 7 and 34, Lee's table comprises file names (81), starting byte information (82), and length of the images (83), as claimed.

Regarding claim 12, Takagi discloses any of the resultant images may arbitrarily be selected, which includes the smallest one.

8. Claims 17, 18, 21, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,486,893 by Takagi in view of U.S. Patent 5,635,984 by Lee, as applied to claim 13, and further in view of U.S. Patent 6,148,149 by Kagle.

Regarding claims 17 and 18, Takagi is silent to altering the original image by rotating or flipping.

Kagle discloses a digital camera system that automatically detects the orientation of the camera when a picture is taken, and then adjusts the picture by rotating (flipping) the image by 90 degrees so that a portrait image corresponds to the default orientation of landscape (column 3, lines 30-40). The image is then assigned an indication of its orientation (column 3, lines 56-67).

It would have been obvious to modify Takagi to further alter the original image by rotation and flipping as taught by Kagle since Kagle teaches that a user may desire for captured images to all conform to a default orientation.

Art Unit: 2623

Regarding claims 21 and 22, Takeda discloses the table includes information about the images such as size and location in memory, but Takeda does not disclose that the degree to which the images were flipped or rotated is stored in the look-up table.

Kagle discloses a digital camera system that automatically detects the orientation of the camera when a picture is taken, and then adjusts the picture by rotating (flipping) the image by 90 degrees so that a portrait image corresponds to the default orientation of landscape (column 3, lines 30-40). The image is then assigned an indication of its orientation (column 3, lines 56-67).

It would have been obvious to modify Takeda by Kagle to achieve the claimed invention by including the orientation data (i.e. degree of flipping/rotating) in the look-up table as claimed, since Kagle teaches that additional information pertaining to the orientation is stored along with the rotated/flipped images (column 3, lines 61-64), and Takeda discloses placing any additional information pertaining to the stored digital images, such as size and location, in a look-up table as shown in figure 5 to facilitate retrieval.

Regarding claim 24, Takagi is silent to compressing each of the resultant images. Takeda discloses storing each of the selected resultant images in a compressed format, but is silent to compressing them into GIF files.

Kagle discloses a digital camera that compresses each of the captured imaged into the GIF format (column 3, lines 7-25).

It would have been obvious to compress each of the resultant images into a GIF file, since Takeda teaches storing the resultant images in compressed form (126, figure 2A), and Kagle teaches that the GIF format is a standard compression format used to compress captured digital

Art Unit: 2623

images.

9. Claims 4, 5, 8, 9, 11, 31, 32, 35, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,486,893 by Takagi in view of U.S. Patent 5,343,560 by Takeda et al. ("Takeda") and U.S. Patent 5,635,984 by Lee, as applied to claims 1 and 28, and further in view of U.S. Patent 6,148,149 by Kagle.

Regarding claims 4, 5, 31, and 32, Takagi is silent to altering the original image by rotating or flipping.

Kagle discloses a digital camera system that automatically detects the orientation of the camera when a picture is taken, and then adjusts the picture by rotating (flipping) the image by 90 degrees so that a portrait image corresponds to the default orientation of landscape (column 3, lines 30-40). The image is then assigned an indication of its orientation (column 3, lines 56-67).

It would have been obvious to modify Takagi to further alter the original image by rotation and flipping as taught by Kagle since Kagle teaches that a user may desire for captured images to all conform to a default orientation.

Regarding claims 8, 9, 35, and 36, Takeda discloses the table includes information about the images such as size and location in memory, but Takeda does not disclose that the degree to which the images were flipped or rotated is stored in the look-up table.

Kagle discloses a digital camera system that automatically detects the orientation of the camera when a picture is taken, and then adjusts the picture by rotating (flipping) the image by 90 degrees so that a portrait image corresponds to the default orientation of landscape (column 3, lines 30-40). The image is then assigned an indication of its orientation (column 3, lines 56-67).

It would have been obvious to modify Takeda by Kagle to achieve the claimed invention by including the orientation data (i.e. degree of flipping/rotating) in the look-up table as claimed, since Kagle teaches that additional information pertaining to the orientation is stored along with the rotated/flipped images (column 3, lines 61-64), and Takeda discloses placing any additional information pertaining to the stored digital images, such as size and location, in a look-up table as shown in figure 5 to facilitate retrieval.

Regarding claims 11 and 38, Takagi is silent to compressing each of the resultant images. Takeda discloses storing each of the selected resultant images in a compressed format, but is silent to compressing them into GIF files.

Kagle discloses a digital camera that compresses each of the captured images into the GIF format (column 3, lines 7-25).

It would have been obvious to compress each of the resultant images into a GIF file, since Takeda teaches storing the resultant images in compressed form (126, figure 2A), and Kagle teaches that the GIF format is a standard compression format used to compress captured digital images.

10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,486,893 by Takagi in view of U.S. Patent 5,635,984 by Lee, as applied to claim 13, and further in view of U.S. Patent 5,835,627 by Higgins et al. ("Higgins").

Regarding claim 23, Takagi is silent to adjusting the size of some of the original images prior to creating the resultant images.

Art Unit: 2623

Higgins discloses an image processing system. In particular, Higgins discloses that, conventionally, digital cameras include algorithms that resize captured images and that resizing is typically done before subsequent processing (column 1, lines 55-67).

It would have been obvious to modify Takagi by Higgins to achieve the claimed invention since Higgins teaches that resizing captured images prior to subsequent processing is a conventional capability of digital cameras and allows a user to place an original image in a desired size.

11. Claims 10 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,486,893 by Takagi in view of U.S. Patent 5,343,560 by Takeda et al. ("Takeda") and U.S. Patent 5,635,984 by Lee, as applied to claims 1 and 28, and further in view of U.S. Patent 5,835,627 by Higgins et al. ("Higgins").

Regarding claims 10 and 37, Takagi is silent to adjusting the size of some of the original images prior to creating the resultant images.

Higgins discloses an image processing system. In particular, Higgins discloses that, conventionally, digital cameras include algorithms that resize captured images and that resizing is typically done before subsequent processing (column 1, lines 55-67).

It would have been obvious to modify Takagi by Higgins to achieve the claimed invention since Higgins teaches that resizing captured images prior to subsequent processing is a conventional capability of digital cameras and allows a user to place an original image in a desired size.

Art Unit: 2623

12. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,343,560 by Takeda et al. ("Takeda") in view of U.S. Patent 6,148,149 by Kagle.

Regarding claims 26 and 27, Takeda does not disclose including data "indicative of whether each of the compressed images was flipped or the degree of rotation as compared to its corresponding original image..." and the image is flipped or rotated "so that elements of the displayed image are arranged the same as they appear in its corresponding original image."

Kagle teaches capturing an image at some orientation. During capture, the camera senses the orientation of the camera and records data indicating the orientation with the image after it is compressed using a standard such as JPEG or GIF. Then, prior to displaying the image, the image is rotated or flipped so that it corresponds to the original orientation of the captured image. For example, a portrait image taken of a person is stored in the default landscape orientation. Then, when the picture is to be viewed, the image is rotated or flipped so that it corresponds to the original portrait orientation rather than the default landscape orientation. This feature "eliminates the need to preview and rotate pictures" (column 2, lines 1-11) and would have been an obvious modification.

It would have been obvious to modify Takeda by Kagle to further rotate or flip the displayed image, as claimed, and as taught by Kagle since Kagle teaches that flipping or rotating an image upon display into the image's original orientation eliminates the need for a user to preview and rotate the images manually.

Art Unit: 2623

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (703) 306-3489. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au, can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (703) 306-0377.

CML

Group Art Unit 2623

14 August 2004

A handwritten signature in black ink, appearing to be 'CML', written in a cursive style.